

WHAT IS CLAIMED IS:

1. For use in a first wireless network, a border base station capable of providing reliable hard handoffs between the first wireless network and a second wireless network, the border
5 base station comprising:

a base station controller operable to manage communications resources within the first wireless network;

a first base transceiver station coupled to the base station controller, the first base transceiver station operable to provide
10 communication for a mobile station in the first wireless network;
and

a transition base transceiver station coupled to the base station controller and located in proximity to a second base transceiver station, the transition base transceiver station
15 operable to provide communication for the mobile station in the second wireless network, the second base transceiver station part of the second wireless network and operable to provide communication for the mobile station in the second wireless network.

2. The border base station of Claim 1, the base station controller further operable to perform a soft handoff for the mobile station between the first base transceiver station and the transition base transceiver station and to perform a hard handoff
5 for the mobile station between the transition base transceiver station and the second base transceiver station.

3. The border base station of Claim 2, the base station controller operable to perform the soft handoff for the mobile
10 station between the first base transceiver station and the transition base transceiver station when the mobile station reaches an overlap region between the first wireless network and the second wireless network.

15 4. The border base station of Claim 2, the base station controller operable to perform the hard handoff for the mobile station between the transition base transceiver station and the second base transceiver station when the mobile station reaches a border for a hard handoff region, the hard handoff region a portion
20 of the second wireless network.

5. The border base station of Claim 1, the first base transceiver station operable to provide communication for the mobile station in the first wireless network at a first carrier frequency, the transition base transceiver station operable to
5 provide communication for the mobile station in the second wireless network at the first carrier frequency, and the second base transceiver station operable to provide communication for the mobile station in the second wireless network at a second carrier frequency.

6. A first wireless network comprising a plurality of border base stations, each one of the border base stations capable of providing reliable hard handoffs between the first wireless network and a second wireless network, each border base station comprising:

5 a base station controller operable to manage communications resources within the first wireless network;

a first base transceiver station coupled to the base station controller, the first base transceiver station operable to provide communication for a mobile station in the first wireless network;

10 and

a transition base transceiver station coupled to the base station controller and located in proximity to a second base transceiver station, the transition base transceiver station operable to provide communication for the mobile station in the
15 second wireless network, the second base transceiver station part of the second wireless network and operable to provide communication for the mobile station in the second wireless network.

20 7. The wireless network of Claim 6, the base station controller further operable to perform a soft handoff for the

mobile station between the first base transceiver station and the transition base transceiver station and to perform a hard handoff for the mobile station between the transition base transceiver station and the second base transceiver station.

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8. The wireless network of Claim 7, the base station controller operable to perform the soft handoff for the mobile station between the first base transceiver station and the transition base transceiver station when the mobile station reaches
10 an overlap region between the first wireless network and the second wireless network.

9. The wireless network of Claim 7, the base station controller operable to perform the hard handoff for the mobile
15 station between the transition base transceiver station and the second base transceiver station when the mobile station reaches a border for a hard handoff region, the hard handoff region a portion of the second wireless network.

20 10. The wireless network of Claim 6, the first base transceiver station operable to provide communication for the

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mobile station in the first wireless network at a first carrier frequency, the transition base transceiver station operable to provide communication for the mobile station in the second wireless network at the first carrier frequency, and the second base
5 transceiver station operable to provide communication for the mobile station in the second wireless network at a second carrier frequency.

11. For use in a border base station in a first wireless network, a method for providing reliable hard handoffs between the first wireless network and a second wireless network, the method comprising:

5 performing a soft handoff for a mobile station between a first base transceiver station in the first wireless network and a transition base transceiver station in the first wireless network; and

performing a hard handoff for the mobile station between the
10 transition base transceiver station and a second base transceiver station in the second wireless network, the transceiver base transceiver station located in proximity to the second base transceiver station.

15 12. The method of Claim 11, performing the soft handoff for the mobile station comprising performing the soft handoff when the mobile station reaches an overlap region between the first wireless network and the second wireless network.

20 13. The method of Claim 11, performing the hard handoff for the mobile station comprising performing the hard handoff when the

mobile station reaches a border for a hard handoff region, the hard handoff region a portion of the second wireless network.

14. The method of Claim 11, performing the soft handoff
5 between the first base transceiver station and the transition base transceiver station comprising performing the soft handoff from the first base transceiver station to the transition base transceiver station, and performing the hard handoff between the transition base transceiver station and the second base transceiver station
10 comprising performing the hard handoff from the transition base transceiver station to the second base transceiver station.

15. The method of Claim 11, performing the soft handoff
between the first base transceiver station and the transition base
15 transceiver station comprising performing the soft handoff from the transition base transceiver station to the first base transceiver station, and performing the hard handoff between the transition base transceiver station and the second base transceiver station
comprising performing the hard handoff from the second base
20 transceiver station to the transition base transceiver station.

16. The method of Claim 11, further comprising:

providing communication for the mobile station at a first carrier frequency in the first wireless network; and

providing communication for the mobile station at the first
5 carrier frequency and at a second carrier frequency in the second wireless network.

17. The method of Claim 16, providing communication for the mobile station at the first carrier frequency in the first wireless
10 network comprising providing communication for the mobile station at the first carrier frequency with the first base transceiver station.

18. The method of Claim 16, providing communication for the
15 mobile station at the first carrier frequency in the second wireless network comprising providing communication for the mobile station at the first carrier frequency with the transition base transceiver station.

20 19. The method of Claim 16, providing communication for the mobile station at the second carrier frequency in the second

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wireless network comprising providing communication for the mobile station at the second carrier frequency with the second base transceiver station.